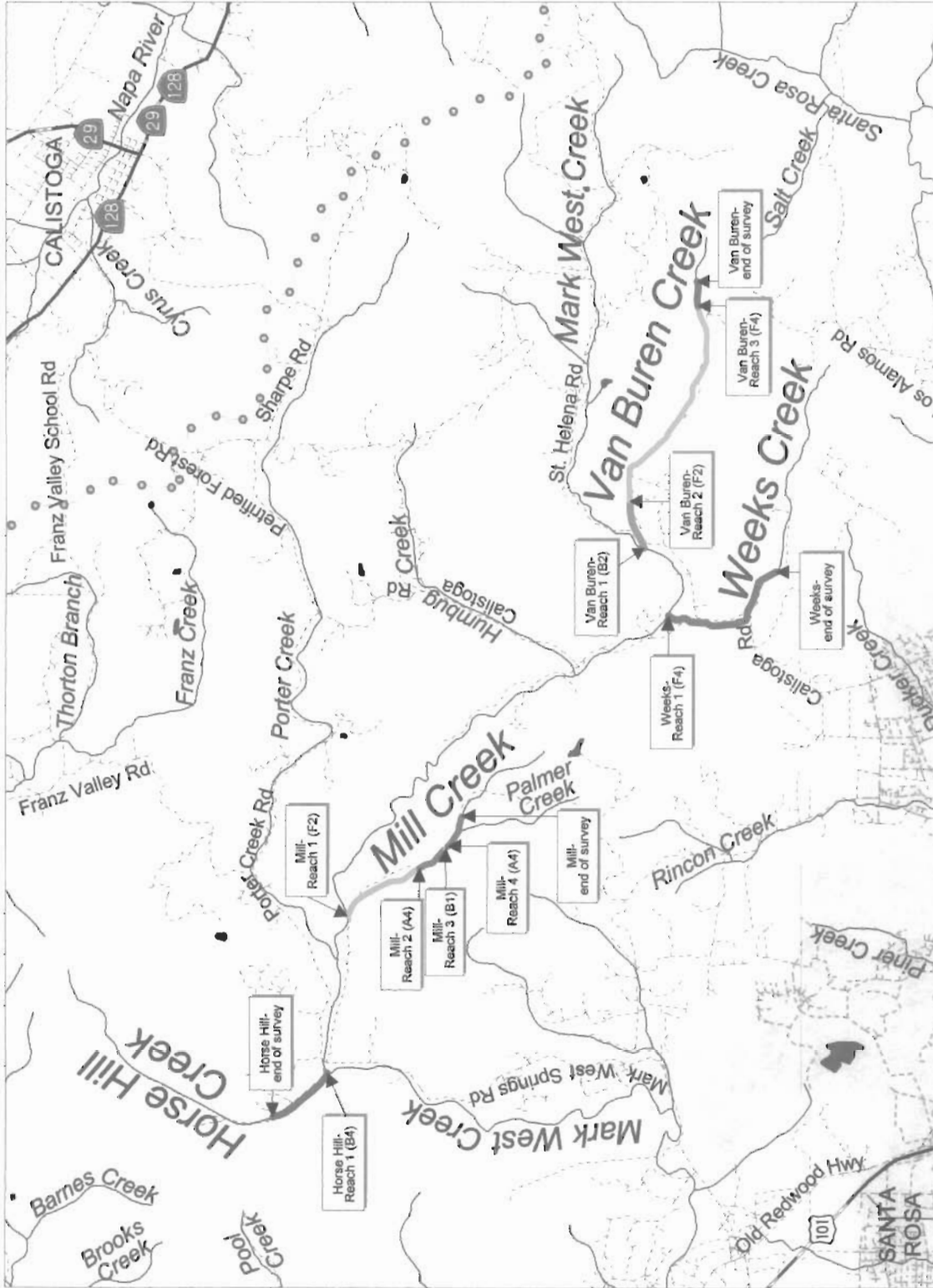
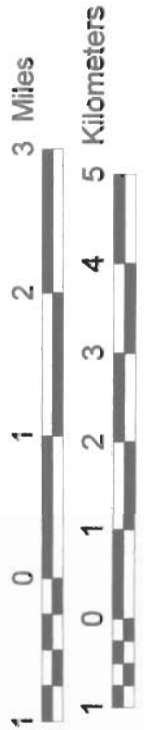


Mark West Tributaries- Horse Hill Creek, Mill Creek, Weeks Creek, Van Buren Creek



Van Buren Creek Tables Graphs Map
 Assessment Completed 1997
 Page 1 of 9

Central Coast Region
 Department of Fish and Game



Scale = 1:85,000

Van Buren Creek

Drainage: Mark West Creek, Russian River

Table 1 - SUMMARY OF RIFLE, FLATWATER, AND POOL HABITAT TYPES

Survey Dates: 08/05/97 to 08/07/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR07WS28 LATITUDE: 38°30'44" LONGITUDE: 122°38'17"

HABITAT UNITS	UNITS FULLY MEASURED	HABITAT TYPE	HABITAT PERCENT OCCURRENCE	MEAN LENGTH (ft.)	TOTAL LENGTH (ft.)	TOTAL PERCENT	MEAN WIDTH (ft.)	MEAN DEPTH (ft.)	MEAN AREA (sq.ft.)	ESTIMATED TOTAL AREA (sq.ft.)	MEAN VOLUME (cu.ft.)	ESTIMATED TOTAL VOLUME (cu.ft.)	MEAN RESIDUAL POOL VOL (cu.ft.)	MEAN SHELTER RATING
16	4	RIFLE	12	28	444	3	3.3	0.2	77	1228	17	271	0	0
46	10	FLATWATER	35	68	3113	22	4.7	0.3	274	12624	82	3776	0	3
45	10	POOL	34	24	1100	8	7.0	0.7	174	7840	151	6797	123	27
23	0	DRY	18	121	2793	20	0.0	0.0	0	0	0	0	0	0
1	0	NOT SURVE	1	6600	6600	47	0.0	0.0	0	0	0	0	0	0
TOTAL UNITS	24				TOTAL LENGTH (ft.)				TOTAL AREA (sq. ft.)			TOTAL VOL. (cu. ft.)		
131					14050				21691			10843		

Van Buren Creek

Drainage: Mark West Creek, Russian River

Table 2 - SUMMARY OF HABITAT TYPES AND MEASURED PARAMETERS

Survey Dates: 08/05/97 to 08/07/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08N07W528 LATITUDE: 38°30'44" LONGITUDE: 122°38'17"

HABITAT UNITS	UNITS FULLY MEASURED	HABITAT TYPE	HABITAT OCCURRENCE	MEAN LENGTH	%	ft.	TOTAL LENGTH	%	ft.	MEAN WIDTH	ft.	MEAN DEPTH	ft.	MEAN MAXIMUM DEPTH	ft.	MEAN AREA	sq.ft.	TOTAL AREA	sq.ft.	EST. POOL VOLUME	cu.ft.	MEAN RESIDUAL VOLUME	cu.ft.	MEAN SHELTER RATING	MEAN CANOPY
14	3	LGR	11	27	377	3	3	0.2	0.8	81	1141	18	252	0	0	0	0	0	0	0	0	0	0	92	
2	1	HGR	2	34	67	0	2	0.3	0.6	44	87	9	18	0	0	0	0	0	0	0	0	0	0	95	
1	1	POW	1	39	39	0	6	0.5	0.9	137	137	69	69	0	40	0	0	0	0	0	0	0	0	90	
2	2	GLD	2	26	52	0	6	0.4	0.7	149	298	55	110	0	0	0	0	0	0	0	0	0	0	93	
34	6	RUN	26	72	2455	17	5	0.3	1.0	303	10295	88	2984	0	0	0	0	0	0	0	0	0	0	87	
9	1	SRN	7	63	567	4	5	0.3	1.1	214	1922	69	619	0	0	0	0	0	0	0	0	0	0	93	
2	1	MCP	2	37	75	1	9	1.1	2.5	321	642	358	715	276	15	0	0	0	0	0	0	0	0	93	
3	1	STP	2	60	179	1	7	0.7	2.0	391	1173	280	840	167	20	0	0	0	0	0	0	0	0	90	
7	2	LSR	5	27	186	1	8	0.8	2.0	204	1430	196	1371	204	61	0	0	0	0	0	0	0	0	95	
14	4	LSBK	11	23	324	2	7	0.8	2.5	165	2306	163	2285	136	14	0	0	0	0	0	0	0	0	89	
18	2	LSBo	14	17	306	2	6	0.6	1.5	112	2020	73	1316	56	28	0	0	0	0	0	0	0	0	90	
1	0	BPR	1	30	30	0	9	1.0	1.5	270	270	270	270	0	90	0	0	0	0	0	0	0	0	95	
23	0	DRY	18	121	2793	20	0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	
1	0	NS	1	6600	6600	47	0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL UNITS	TOTAL UNITS			LENGTH (ft.)			14050			AREA (sq.ft.)	21720		TOTAL VOL. (cu.ft.)	10849											

Van Buren Creek Tables Graphs Map

Van Buren Creek

Drainage: Mark West Creek, Russian River

Table 3 - SUMMARY OF POOL TYPES

Survey Dates: 08/05/97 to 08/07/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08N07W52E LATITUDE: 38°30'44" LONGITUDE: 122°38'17"

HABITAT UNITS	UNITS FULLY MEASURED	HABITAT TYPE	HABITAT PERCENT OCCURRENCE	MEAN LENGTH (ft.)	TOTAL LENGTH (ft.)	PERCENT LENGTH	MEAN WIDTH (ft.)	MEAN DEPTH (ft.)	MEAN AREA (sq. ft.)	TOTAL AREA EST. (sq. ft.)	MEAN VOLUME (cu. ft.)	TOTAL VOLUME EST. (cu. ft.)	MEAN RESIDUAL POOL VOL. (cu. ft.)	MEAN SHELTER RATING
5	2	MAIN	11	51	254	23	7.5	0.8	363	1814	311	1556	221	18
39	8	SCOUR	87	21	816	74	6.9	0.7	148	5756	127	4972	109	27
1	0	BACKWATER	2	30	30	3	8.9	1.0	270	270	270	270	0	90
TOTAL UNITS 45	TOTAL UNITS 10			TOTAL LENGTH (ft.) 1100					TOTAL AREA (sq. ft.) 7840			TOTAL VOL. (cu. ft.) 6797		

Van Buren Creek

Drainage: Mark West Creek, Russian River

Table 4 - SUMMARY OF MAXIMUM POOL DEPTHS BY POOL HABITAT TYPES

Survey Dates: 08/05/97 to 08/07/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR07WS28 LATITUDE: 38°30'44" LONGITUDE: 122°38'17"

UNITS	HABITAT	HABITAT	<1 FOOT	<1 FOOT	1-<2 FOOT	1-<2 FOOT	2-<3 FOOT	2-<3 FOOT	3-<4 FOOT	3-<4 FOOT	>=4 FOOT	>=4 FOOT
MAX DPTH	TYPE	PERCENT	MAXIMUM	DEPTH	MAXIMUM	PERCENT	MAXIMUM	PERCENT	MAXIMUM	PERCENT	MAXIMUM	PERCENT
MEASURED		OCCURRENCE		OCCURRENCE		DEPTH	OCCURRENCE	DEPTH	OCCURRENCE	DEPTH	OCCURRENCE	DEPTH
2	MCP	4	0	0	1	50	1	50	0	0	0	0
3	STP	7	0	0	2	67	1	33	0	0	0	0
7	LSR	16	0	0	6	86	1	14	0	0	0	0
14	LSBK	31	1	7	11	79	2	14	0	0	0	0
18	LSBd	40	4	22	14	78	0	0	0	0	0	0
1	BPR	2	0	0	1	100	0	0	0	0	0	0

TOTAL
UNITS
45

Van Buren Creek

Drainage: Mark West Creek, Russian River

Table 5 - Summary of Shelter by Habitat Type

Survey Dates: 08/05/97 to 08/07/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08N07W05S28 LATITUDE: 38°30'44" LONGITUDE: 122°38'17"

UNITS	MEASURED	SHELTER	HABITAT	TYPE	UNDERCUT	BANKS	SWD	% TOTAL	LWD	% TOTAL	ROOT	% TOTAL	MASS	VEGETATION	TERR.	% TOTAL	AQUATIC	% TOTAL	WHITE	% TOTAL	BOULDERS	% TOTAL	BEDROCK	LEDGES
14	12	LGR			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	HGR			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	POW			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0
2	2	GLD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	8	RUN			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	3	SRN			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	MCP			0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	82	0	0	0
3	3	STP			0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	54	43	0	0
7	4	LSR			12	4	4	4	5	0	49	0	0	0	0	0	0	0	0	0	30	0	0	0
14	12	LSEK			0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	46	47	0	0
18	18	LSBO			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	9	0	0
1	1	BPR			0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	30	30	0	0
23	9	DRY			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	NS			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	76				2	1	2	13	0	0	0	0	0	0	0	0	0	0	0	63	19	0	0	0
45	40				2	1	2	14	0	0	0	0	0	0	0	0	0	0	0	60	21	0	0	0

Van Buren Creek

Drainage: Mark West Creek, Russian River

Table 6 - SUMMARY OF DOMINANT SUBSTRATES BY HABITAT TYPE

Survey Dates: 08/05/97 to 08/07/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR07WS28 LATITUDE: 38°30'44" LONGITUDE: 122°38'17"

TOTAL HABITAT UNITS	UNITS SUBSTRATE MEASURED	HABITAT TYPE	% TOTAL SILT/CLAY DOMINANT	% TOTAL SAND DOMINANT	% TOTAL GRAVEL DOMINANT	% TOTAL SM COBBLE DOMINANT	% TOTAL LG COBBLE DOMINANT	% TOTAL BOULDER DOMINANT	% TOTAL BEDROCK DOMINANT
3		LGR	0	0	0	33	67	0	0
1		HGR	0	0	0	0	0	100	0
1		POW	0	0	0	0	100	0	0
2		GLD	0	50	50	0	0	0	0
6		RUN	0	0	0	0	67	33	0
1		SRN	0	0	0	0	0	0	100
1		MCP	0	100	0	0	0	0	0
1		STP	0	0	0	0	0	0	100
2		LSR	0	50	50	0	0	0	0
4		LSBK	0	0	0	0	0	0	100
2		LSBo	0	100	0	0	0	0	0
0		BPR	0	0	0	0	0	0	0
6		DRY	0	0	50	0	0	50	0
0		NS	0	0	0	0	0	0	0

Van Buren Creek

APPENDIX A. Summary of Mean Percent Vegetative Cover for Entire Stream

Mean Percent Canopy	Mean Percent Evergreen	Mean Percent Deciduous	Mean Right bank % Cover	Mean Left Bank % Cover
90.16	76.69	23.31	92.03	92.07

APPENDIX B.

Mean Percentage of Dominant Substrate

Dominant Class of Substrate	Number Units Right Bank	Number Units Left Bank	Percent Total Units
Bedrock	11	7	30.51
Boulder	7	7	23.73
Cobble/Gravel	11	11	37.29
Silt/clay	1	4	8.47

Mean Percentage of Dominant Vegetation

Dominant Class of Vegetation	Number Units Right Bank	Number Units Left Bank	Percent Total Units
Grass	0	0	0
Brush	2	2	6.78
Deciduous Trees	4	1	8.47
Evergreen Trees	24	26	84.75
No Vegetation	0	0	0

APPENDIX C. FISH HABITAT INVENTORY DATA SUMMARY

STREAM NAME: Van Buren Creek

SAMPLE DATES: 08/05/97 to 08/07/97

SURVEY LENGTH:

MAIN CHANNEL: 13852 ft.

SIDE CHANNEL: 198 ft.

LOCATION OF STREAM MOUTH:

USGS Quad Map: Mark West Sprgs

Latitude: 38°30'44"

Legal Description: T08NR07WS28

Longitude: 122°38'17"

SUMMARY OF FISH HABITAT ELEMENTS BY STREAM REACH

STREAM REACH 1 (Units 1-36)

Channel Type: B2

Main Channel Length: 2284 ft.

Side Channel Length: 198 ft.

Riffle/Flatwater Mean Width: 3.7 ft.

Pool Mean Depth: 0.7 ft.

Base Flow: 0.0 cfs

Water: -64°F Air: 76-83°F

Dom. Bank Veg.: Evergreen Trees

Bank Vegetative Cover: 95%

Dom. Bank Substrate: Cobble/Gravel

Embeddness Value: 1. 0% 2. 0% 3. 42% 4. 58% 5. 0%

Mean Canopy Density: 88%

Evergreen Component: 68%

Deciduous Component: 32%

Pools by Stream Length: 8%

Pools >=2 ft. Deep: 0%

Pools >=3 ft. Deep: 0%

Mean Pool Shelter Rtn: 28

Dom. Shelter: Boulders

Occurrence of LOD: 0%

Dry Channel: 1377 ft.

STREAM REACH 2 (Units 37-105)

Channel Type: F2

Main Channel Length: 10433 ft.

Side Channel Length: 0 ft.

Riffle/Flatwater Mean Width: 4.6 ft.

Pool Mean Depth: 0.8 ft.

Base Flow: 0.0 cfs

Water: 62-70°F Air: 78-88°F

Dom. Bank Veg.: Evergreen Trees

Bank Vegetative Cover: 92%

Dom. Bank Substrate: Cobble/Gravel

Embeddness Value: 1. 0% 2. 0% 3. 32% 4. 68% 5. 0%

Mean Canopy Density: 90%

Evergreen Component: 78%

Deciduous Component: 22%

Pools by Stream Length: 7%

Pools >=2 ft. Deep: 19%

Pools >=3 ft. Deep: 0%

Mean Pool Shelter Rtn: 23

Dom. Shelter: Boulders

Occurrence of LOD: 20%

Dry Channel: 998 ft.

STREAM REACH 3 (Units 106-128)

Channel Type: F4

Main Channel Length: 1135 ft.

Side Channel Length: 0 ft.

Riffle/Flatwater Mean Width: 4.2 ft.

Pool Mean Depth: 0.7 ft.

Base Flow: 0.0 cfs

Water: 64-66°F Air: 82-84°F

Dom. Bank Veg.: Evergreen Trees

Bank Vegetative Cover: 89%

Dom. Bank Substrate: Cobble/Gravel

Embeddness Value: 1. 0% 2. 0% 3. 14% 4. 86% 5. 0%

Mean Canopy Density: 93%

Evergreen Component: 85%

Deciduous Component: 15%

Pools by Stream Length: 11%

Pools >=2 ft. Deep: 0%

Pools >=3 ft. Deep: 0%

Mean Pool Shelter Rtn: 62

Dom. Shelter: Boulders

Occurrence of LOD: 25%

Dry Channel: 220 ft.